

ABSTRACT OF THE DISCLOSURE

An electric motor having an armature which includes a coating of thermally conductive plastic applied in a conventional injection molding process. The armature also includes a fan which is integrally formed from the thermally conductive plastic applied to the armature. The process of molding thermally conductive plastic around the armature and integrally forming a fan at one end of the armature completely eliminates the need to apply one or more coatings of a trickle resin to the armature. It also eliminates the need to separately form a fan and to secure the separately formed fan by a suitable adhesive to the armature, which together significantly simplify and reduce the manufacturing cost of the armature. The thermally conductive molded plastic coating also better fills the spaces between the magnet wires wound around the armature, thus promoting even more efficient cooling of the armature during use and better holding of the magnet wires stationary relative to one another.